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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,524	02/05/2004	Jeffrey Lloyd	60130-2011;04MRA0100	5397
26096	7590	04/11/2006	EXAMINER	
CARLSON, GASKEY & OLDS, P.C. 400 WEST MAPLE ROAD SUITE 350 BIRMINGHAM, MI 48009			KRAMER, DEVON C	
			ART UNIT	PAPER NUMBER
			3683	

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,524

Applicant(s)

LLOYD, JEFFREY

Examiner

Devon C. Kramer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-12,14-17,19 and 21-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-12,14-17,19 and 21-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1) A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/3/06 has been entered.

Claim Rejections - 35 USC § 103

2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3) Claims 1, 3-9, 12, 14-15, 17, 21-22, 25 and 27-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behmenburg et al (20030173723) in view of Schofield (4770095).

In re claims 1, 12, 14, 17, 25, 27-30, Behmenburg et al provides an air spring assembly comprising: a piston (127), a piston airbag (124) mounted to the piston to form a first variable volume chamber; and a primary airbag (116) forming a second variable volume chamber mounted adjacent the piston airbag, such that a change in pressure in one chamber operates to change the spring rate of the other chamber.

Please note that Behmenburg et al teaches an intermediate member disposed between the two air bags so they are not in direct contact.

It would have been obvious to one of ordinary skill in the art to eliminate part (126) in Behmenburg et al to provide the secondary airbag to roll on the piston air bag merely to reduce the weight and parts of the device.

Behmenburg et al teaches two hermetically sealed chambers, but does not teach that the chambers can be supplied with air independently.

Schofield teaches two air springs which can be supplied with air independently.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the air bags of Behmenburg et al with independent air supplies merely to be able to adjust the spring to a desired level, and to increase control. Further, it isolates the springs in the event of failure of a single air bag.

In re claims 3-5, please note that this feature is inherent to the device of Behmenburg et al.

In re claims 6-8, 15 and 31, Behmenburg et al teaches a first band to connect the air bag to the piston, but lacks a second band. Please note that Behmenburg et al performs the function with a single band (122).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have secured the air bag of Behmenburg et al to the piston using a first and second band and to provide a third band to secure the secondary air bag to prevent leakage of air and ensure a secure connection, and since it has been held that

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separation of the essential working parts of a device involves only routine skill in the art.

In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349

IN re claim 9, see element 127.

In re claim 21-22, see figure 5 and element 134.

4) Claims 10, 19, 23-24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffiths (6604734) in view of Behmenburg et al (20030173723).

In re claims 10, 19, and 26, Griffiths teaches an air suspension system for a vehicle having a frame member (22), the system further comprising: a longitudinal member (14) extending generally lengthways of the vehicle frame member and mountable to the vehicle for pivotable movement about an axis generally transverse to the frame member; and an air spring (16). Griffiths lacks the specific air bag arrangement claimed. Please note that Behmenburg et al teaches an intermediate member disposed between the two air bags so they are not in direct contact.

It would have been obvious to one of ordinary skill in the art to eliminate part (126) in Behmenburg et al to provide the secondary airbag to roll on the piston air bag merely to reduce the weight and parts of the device.

Behmenburg et al teaches the claimed air bag arrangement, see the above rejection of claim 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the airbag of Griffiths with the air bag of Behmenburg et al to provide an air spring with a variable spring rate.

In re claims 23-24, see figure 5 and element 134.

5) Claims 11 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffiths (6604734) in view of Behmenburg et al (20030173723) and further in view of Schofield (4770095).

In re claims 11 and 16, Griffiths as modified by Behmenburg et al teaches two hermetically sealed chambers, but does not teach that the chambers can be supplied with air independently.

Schofield teaches two air springs which can be supplied with air independently.

It would have been obvious to one of ordinary skill in the art at the time of the invention to have provided the air bags of Griffiths as modified by Behmenburg et al with independent air supplies merely to be able to adjust the spring to a desired level, and to increase control. Further, it isolates the springs in the event of failure of a single air bag.

Response to Arguments

6) Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7) The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Clark teaches the method of regulating a hydraulic damper and air spring to achieve a desired ride or feel in a vehicle.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Devon C. Kramer whose telephone number is 571-272-7118. The examiner can normally be reached on Mon-Fri 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571)272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Devon C Kramer
Primary Examiner
Art Unit 3683

Devon Kramer
4/7/06

DK